



Campus Suicide Prevention and Intervention: Putting Best Practice Policy into Action

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ABSTRACT

Findings from biannual American College Health Association-National College Health Assessment surveys have highlighted the prevalence of depression, suicidal ideation, and attempted suicides on Canadian university campuses and the need for comprehensive suicide prevention programs. This article explores how one large western Canadian university has attempted to implement the comprehensive framework for suicide prevention developed by the Jed Foundation. Based on recommendations included in this framework, a multi-faceted suicide prevention strategy was developed, focusing on seven broad intervention areas: 1) enhanced student connectedness and engagement; 2) increased community suicide awareness; 3) gatekeeper training; 4) collaborative identification and treatment of depression; 5) specialized training in assessment and treatment of suicide; 6) increased accessibility to counselling services for at-risk students; and 7) enhanced crisis management policy and procedures. This article reviews relevant empirical support for these seven intervention domains, provides examples of initiatives in each domain, and identifies implications for best practice post-secondary policy.

RÉSUMÉ

Les résultats des sondages de la « National College Health Association » soulèvent la prévalence de la dépression, des pensées suicidaires, et des tentatives de suicide parmi les étudiants des universités canadiennes et le besoin de programmes compréhensifs de prévention du suicide. Dans cet article, les auteurs décrivent l'implantation, par une université à vocation de recherche de l'ouest canadien, d'un encadrement global voué à la prévention du suicide développé par la Fondation Jed. D'après les recommandations de la Fondation Jed, l'approche multilatérale de la prévention du suicide englobe sept dimensions d'interventions : 1) une hausse d'engagement des étudiants dans les activités universitaires et parmi les communautés étudiantes ; 2) une sensibilisation augmentée par rapport à la prévention du suicide ; 3) la formation du personnel « filtre » dans l'institution ; 4) une approche collaborative à l'identification et le traitement de la dépression ; 5) une formation spécialisé en identification et traitement du suicide ; 6) un meilleur accès des étudiants à taux de risques relevées aux services d'assistance psychologique ; et, 7) un enrichissement des politiques et procédures concernant la gestion des risques. Dans cet article, les auteurs résument les données appuyant les interventions décrites ci-dessus, offrent des exemples des initiatives dans chacune des dimensions listées et proposent les implications pour le renforcement des compétences universitaires dans ces domaines.

INTRODUCTION

Suicide prevention has become increasingly important for colleges and universities in recent years. High-profile cases of student suicide that have led to law suits have focused attention on accountability issues and challenged campuses to carefully consider their role and responsibility related to the notion of “duty to care.” As well, although the incidence of suicide among post-secondary students has been estimated to be about half that of the general population, it is the second leading cause of student death (Berman, Jobes, & Silverman, 2006), and its impact on a campus community is pervasive and lasting.

In the 2008 American College Health Association-National College Health Assessment (ACHA-NCHA) survey, Canadian institutions noted that 11.2% of their students reported having seriously considered attempting suicide and 1.4% reported having attempted suicide one or more times in the last school year. It is estimated that at least 90% of all people who die by suicide have suffered from a mental illness, the most common being depression (Balazs et al., 2006). ACHA-NCHA (2008) survey data suggest, however, that the majority of students who experience depression do not seek treatment. This lower level of treatment seeking may be related to a number of factors, such as a reduced

ability to recognize or accurately appraise warning signs and a tendency toward withdrawal and isolation – both of which are consistent with depression. In addition, because mental illness and suicide continue to be taboo topics, affected individuals may feel reticent about seeking assistance. Those close to them may not be aware of the signs and symptoms of mental illness or suicidality or, if they are aware, may not feel comfortable or may not know how to reach out to offer assistance.

Suicide prevention planning must therefore focus proactively on strategies that increase students' ability to manage demands effectively and connect at-risk students with support. In addition, resources, policies, and protocols must be aligned to strengthen a campus community's capacity to respond effectively. Advances toward a comprehensive campus suicide prevention model are briefly reviewed in the next section. This discussion is followed by an overview of how such a model is being implemented at the University of British Columbia (UBC), a large public university in western Canada.

DEVELOPMENT OF A MODEL FOR CAMPUS SUICIDE PREVENTION

There is growing consensus on the responsibility of campuses to implement systemic approaches to suicide prevention that build a campus community's capacity to provide support (Berman et al., 2006). Efforts near the turn of the millennium focused on identifying crucial program elements (Murphy, 2004; National Mental Health Association & The Jed Foundation [NMHA/JED], 2002), but post-secondary institutions lacked a comprehensive, campus-wide approach to draw upon. In response to this lack of consensus among colleges and universities, the Jed Foundation convened a Round Table in 2005 to address the management of acutely distressed or suicidal students, an action that resulted in the publication of the *Framework for Developing Institutional Protocols for the Acutely Distressed or Suicidal College Student* (Jed Foundation, 2006). The framework provides a model for comprehensive mental health promotion and suicide intervention for colleges and universities (see Figure 1).

Specifically, the framework identifies eight key domains, which, when implemented together, constitute an effective network of supportive resources and practices that promote mental health and reduce the likelihood that students experiencing suicidality go unnoticed and untreated. The domains of this framework span the continuum of care from prevention through crisis response. Key preventive domains are Social Marketing, to raise community awareness; Life Skills Development, to increase students' capacity to effectively manage demands; Social Network Promotion, to increase students' sense of meaningful connection; and Means Restriction, to limit access to potential lethal means. Educational Programs, to provide training in identifying and reaching out to at-risk students, Questionnaire/Screening programs, to identify potentially high-risk students, and Mental Health Services comprise the Intervention domains. Finally, the Crisis Management domain addresses policies and programs that enable a comprehensive response to suicide attempts and high-risk behaviour.

The Jed Foundation framework also provides a detailed outline of issues to consider when developing or revising protocols for responding to acutely distressed or suicidal students, including such issues as voluntary and involuntary hospitalization, post-crisis follow-up, documentation, emergency contact notification, and mental health leave and re-entry.

The framework identifies the “lead” individuals or departments with primary responsibility for implementing each domain. The President’s office is identified as responsible for overall coordination and communication across campus departments, for the development or revision of institutional policies and procedures as these relate to suicide prevention, and for the implementation of a risk surveillance and tracking system for self-injurious behaviour, as well as other safety and health-related indicators.

The eight domains of the Jed Foundation framework are well established in the field of suicide prevention and entirely consistent with national strategy development in Canada. Specifically, the Canadian Association of Suicide Prevention (CASP) document *Blueprint for a Canadian National Suicide Prevention Strategy* (CASP, 2004) affirms that “suicide prevention is everyone’s responsibility” and calls for broad-based support for suicide prevention efforts at all system levels (p. 8). Consistent with the Jed Foundation framework, the CASP blueprint concludes that prevention efforts must be informed by scientific evidence and must be holistic and multi-tiered, encompassing a broad range of “mental, physical, social, spiritual and holistic health” (p. 9). In effect, suicide prevention must be based on the establishment of caring and committed communities, with involvement from all sectors in a multi-strategy approach. It is worth noting that many of the interventions and principles promoted to enhance suicide prevention are also likely to enhance the quality of the learning environment for all students.

IMPLEMENTING CAMPUS SUICIDE PREVENTION STRATEGIES

This section outlines how UBC, a large western Canadian university, is attempting to implement seven key suicide prevention strategies informed by the Jed Foundation (2006) framework: 1) enhanced student connectedness and engagement (Jed domains: Social Network Promotion; Life Skills Development); 2) suicide awareness (Jed domain: Social Marketing); 3) gatekeeper training (Jed domain: Educational Programs); 4) collaborative identification and treatment of depression (Jed domains: Questionnaire/Screening; Mental Health Service); 5) specialized training in assessment and treatment of suicide (Jed domain: Mental Health Service); 6) increased accessibility to counselling services for at-risk students (Jed domain: Mental Health Service); and 7) enhanced crisis management policy and procedures (Jed domain: Crisis Management). The Jed domain labelled Means Restriction, although currently not addressed by this broad-based prevention effort, is nonetheless the target of separate programs managed by campus security, local law enforcement, and the university administration.

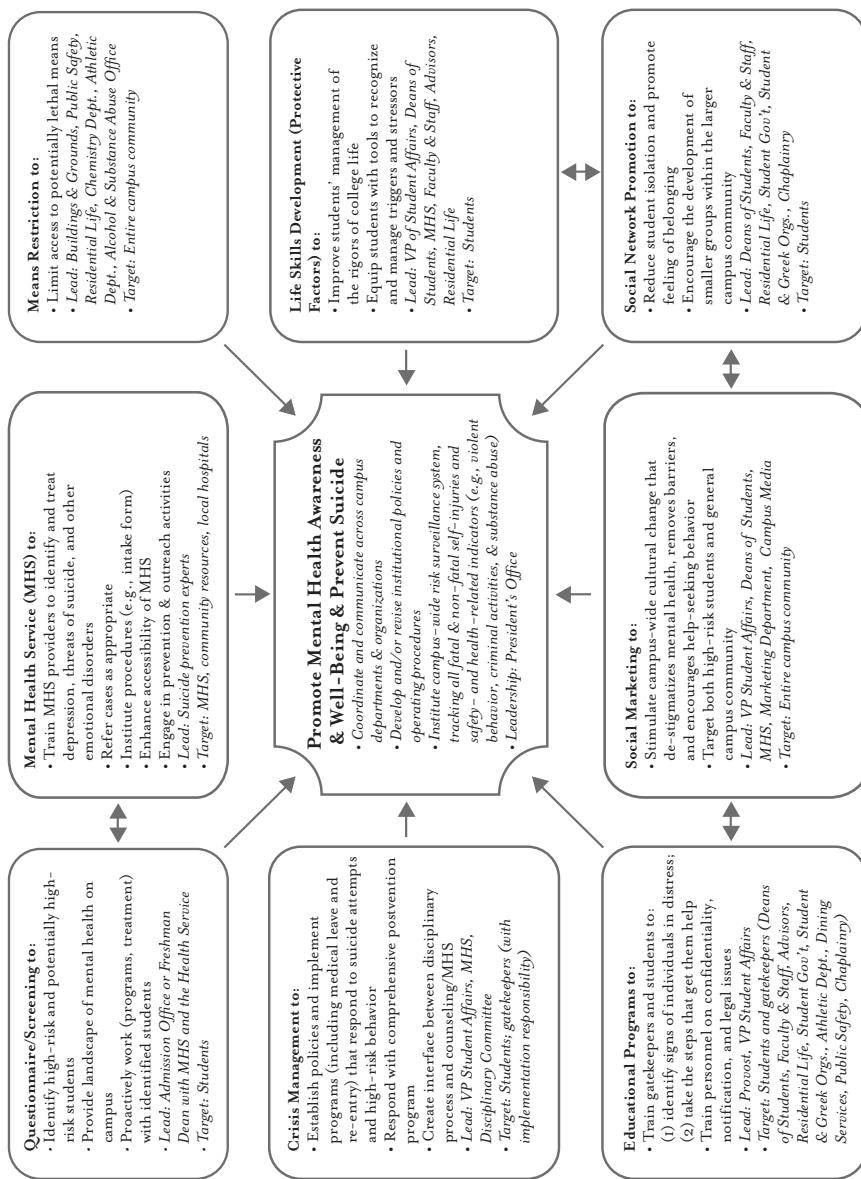


Figure 1. Jed/EDC partnership model: Elements of a comprehensive suicide prevention program for colleges and universities.

From Framework for Developing Institutional Protocols for the Acutely Distressed or Suicidal College Student, by The Jed Foundation, 2006 (www.jedfoundation.org). Used with permission of The Jed Foundation.

Enhanced Student Connectedness and Engagement

The National Center on Addiction and Substance Abuse (CASA) at Columbia University has criticized systems of higher education for tending to view mental health and learning as unrelated and separate spheres. Indeed, CASA has hypothesized that “students who are engaged in their community and society may be at lower risk for substance abuse and depression than other students,” citing data (Hellandsjøbu, 2002) that support the link between adolescent involvement in extracurricular sports or community service and decreased risk for substance abuse and depression (Columbia University, CASA, 2003, p. 3). Suicide has been shown to have strong links with both depression and alcohol use (Kelly, Lynch, Donovan, & Clark, 2001) and may well share a similar relationship with student engagement.

Swanson (2007) summarized theory that conceptualizes student engagement as involvement in empirically supported learning activity and as civic engagement, reflected by social responsibility and active involvement in a participatory democracy. She also cited several studies that show a correlation between engaged learning and various positive mental-health indicators. This theory and research support the creation of opportunities for students to become meaningfully involved as learners and as citizens in their campus community.

Creating small groups within the campus community to reduce students' isolation and to promote a sense of belonging is a key goal of the Social Network Promotion domain of the Jed Foundation framework. At UBC, “making the big small” is a key principle within the Vice-President, Students, strategic plan and has focused attention on creating opportunities for students to develop meaningful connections with the campus community. In addition to orientation programs, numerous opportunities are made available for student involvement in peer programs and leadership training, both within and across academic programs, while recognition and award programs acknowledge contributions and reinforce participation. A website with a complete list of peer programs and leadership opportunities links students to detailed information about the programs and how to get involved in them (<http://www.students.ubc.ca/leadership/involve.cfm>). In addition, educational practices that facilitate engaged learning, such as service learning, are becoming increasingly integrated within academic programs. However, although these activities and practices constitute important steps toward enhancing student engagement at UBC, it is recognized that the bulk of the work in this area remains to be done, as is the case with most other post-secondary institutions.

Nathan (2006) recommended that universities monitor the effectiveness of community-building interventions and continue to seek feedback from students about actual campus experience, bearing in mind cautions that these interventions may not always work as intended in the face of the formidable challenges and pressures facing students. The National Survey of Student Engagement (NSSE) is being used increasingly by colleges and universities to measure student engagement in educational activities that have been found to enhance

and promote learning (Kuh, Kinzie, Schuh, & Whitt, 2005). In 2006, UBC began using the NSSE to measure student engagement, the first large research university in Canada to do so. A comparison of the 2006 and 2008 NSSE data at UBC indicates significant improvements, albeit with small effect sizes, in all areas of student engagement (UBC, Planning and Institutional Research, 2008).

Suicide Awareness

A recent study found that although 42% of college students agreed that suicide was a problem on North American campuses, only 10% agreed that suicide was a problem on their particular campus (Westefeld et al., 2005). In the same study, only 26% of respondents indicated that they were aware of supportive campus resources targeting suicide. These data suggest a continued need for increased awareness about suicide on post-secondary campuses. Increasing awareness of suicide as a preventable public-health problem and of readily available and effective resources are key goals of the Social Marketing domain of the Jed Foundation framework; they are also the explicitly stated primary goals of the CASP (2004) blueprint and the U. S. *National Strategy for Suicide Prevention* (U.S. Department of Health and Human Services [DHHS], 2001).

Evaluation of the effectiveness of suicide awareness efforts, however, often lags behind implementation efforts (Chambers et. al., 2005). A review by Gould, Greenberg, Velting, & Shaffer (2003) suggested that suicide awareness campaigns often had positive effects on the attitude toward and knowledge about suicide and that these campaigns increased help-seeking. Conversely, some studies of suicide awareness programs targeting high-school adolescents found these campaigns had negative effects, including perceptions by at-risk adolescents that talking about suicide would increase the risk for suicide attempts (Overholser, Hemstreet, Spirito, & Vyse, 1989; Shaffer et al., 1990). However, a more recent controlled study exposing post-secondary students to information about warning signs for suicide found no negative emotional impact (Rudd et al., 2006). There is also some promising support for the effectiveness of suicide awareness campaigns in the increasing usage of emergency services (Oliver et al., 2008).

In 2005, UBC launched its own suicide awareness campaign in collaboration with key community partners, including a crisis centre, a community counselling service for suicidal individuals, and a suicide survivor's coalition. Among the specific goals of this project are promoting awareness that suicide is preventable, increasing awareness of the warning signs of suicide and of available community resources, and increasing visibility for suicide prevention and intervention. The annual campaign, which begins with World Suicide Prevention Day on September 10th, involves a number of activities, such as a poster campaign and the widespread distribution of information cards, with warning signs and resources, and the promotion of suicide awareness through displays at orientations and wellness-related events, including an annual wellness symposium and student wellness fair. The campaign targets the entire campus

community and is run by a standing Suicide Awareness Committee, comprised of student, staff, and faculty representatives, as well as representatives from community partners. The campaign is jointly funded by several student support departments as well as the human resources department.

The Suicide Awareness Committee recognizes the need to measure the success of the awareness campaign. Although anecdotal experience, such as students being referred to mental health services as a direct result of learning about resources from posters, suggests some program success, the systematic evaluation of strategies is required to ascertain their relative effectiveness and to inform future program development.

Gatekeeper Training

Gatekeeper training is a key campus suicide-prevention strategy that is identified in the Educational Programs domain of the Jed Foundation framework. Gatekeepers are individuals who are in close contact with other members of their community on a regular basis and are trained to identify warning signs of imminent risk for suicide and to help connect at-risk individuals with the professional assistance they need. There is growing support for the effectiveness of gatekeeper-training programs in increasing self-reported knowledge about suicide and suicide interventions, self-appraisals of ability to respond to a suicidal crisis, and intention to help (Cross, Matthieu, Cerel, & Knox, 2007; Hazel & McDonnell, 2003; King & Smith, 2000; Wyman et al., 2008), including some preliminary support for online training efforts (Stone, Barber, & Potter, 2005). Perhaps the most rigorous study to date used a randomized trial to assess the effectiveness of a gatekeeper-training program targeting secondary-school staff (Wyman et al., 2008). Consistent with previous results, trained gatekeepers reported increased knowledge and perceived preparedness to deal with a suicidal crisis. However, an actual increase in suicide identification behaviours was found only in staff members who already had “natural gatekeeper” roles through which they communicated with students about student distress. Similar rigorous studies specifically addressing the post-secondary population are largely absent but would be instrumental in helping to assess the value and impact of gatekeeper programs on post-secondary campuses.

With a student population of more than 45,000, UBC recognized early on that, in order to train a sufficient number of gatekeepers, the entire campus community had to be involved. For this reason, the university implemented the QPR (Question, Persuade, Refer) Gatekeeper Training Program, developed by Dr. Paul Quinnett (2007). It is a “train the trainer” program, whereby faculty and staff across departments take a one-day course to become trainers, after which they provide gatekeeper training to their departments and the wider campus community. The program allows the campus community to build capacity over time and to maximize the use of existing human resources. Established training materials, online resources to support instructors, and online training capacity that makes training more accessible are provided by the program.

Gatekeeper training is a core suicide prevention strategy at UBC and involves multiple levels of the university community. As with the annual Suicide Awareness Campaign, the QPR Gatekeeper Training Program targets the entire campus community – students, faculty, and staff. Since its launch in February 2006, 96 QPR instructors have been trained across UBC's two campuses and, in turn, these instructors have provided gatekeeper training for over 1400 students, faculty, and staff. To support the long-term sustainability of the program, a steering committee was established in 2007, consisting of representatives from student counselling, residence life, human resources, and faculty advising. Meeting once a month, the members of this committee oversee ongoing gatekeeper-training initiatives, including an annual program launch and a refresher event that is held to support instructor training by building the training network and by sharing tips for training. A website also provides useful resources for instructors (www.students.ubc.ca/counselling/qpr).

Since its inception, the gatekeeper training program has highlighted several challenges. Instructor attrition is an ongoing challenge, as faculty and staff retire or leave the university for employment elsewhere. Of the 96 faculty and staff who were trained as instructors at UBC, 79 remain. Another challenge is maximizing the training potential of the instructor group. Of the 79 instructors, only about 30% have been actively involved in providing gatekeeper training. To support those instructors who have not been active, a mentorship program has been recently established in which inexperienced instructors are partnered with more-experienced instructors to provide training sessions.

Systematic data collection from questionnaires administered to gatekeepers pre and post training is currently underway, and preliminary results indicate that the training they receive increases knowledge competences and impacts attitudes favourably. Another source of data is expected from the instructor recertification process, which is required every three years; this process surveys the instructors' involvement in training and suicide prevention activity.

Collaborative Identification and Treatment of Depression

A strong link exists between depression and suicide, with estimates of up to 90% of suicide attempts occurring in the context of “clinically significant depressive symptoms” (Balazs et al., 2006). This link may be particularly strong for mixed depression (the experience of a combination of depressive and hypo-manic symptoms) and for “agitated depression,” both of which have been associated with increased risk over a depressive episode in isolation (Balazs et al., 2006). Therefore, detection and treatment of mood disorders, including Major Depressive Disorder and Bipolar I and II Disorders, have long been viewed as important targets for suicide prevention (Khuri & Akistal, 1983; Stoff & Mann, 1997).

The Jed Foundation framework recommends, as part of the Mental Health Service domain, that mental health providers be trained in identification and treatment of depression. However, researchers have determined that only about a third of individuals who complete suicide have been in contact with a men-

tal health provider within one month of suicide; a much greater proportion, roughly half, have been in contact with a primary-care physician within that same period (Luoma, Martin, & Pearson, 2002). For this reason, training primary-care physicians to identify, treat, and refer patients with depression is recognized as an important suicide prevention strategy (Kutcher, 2008). This strategy also underscores the importance of collaborative treatment or “shared care” models that support effective integration of available medical and mental-health services on post-secondary campuses (Sedgwick, Washburn, Newton, & Mirwaldt, 2008). Collaborative practice, which involves intentionally planned and mutually interdependent patient care (Oandasan et al., 2004), is thought to promote effective treatment not only for depression but also for suicidal behaviour (Kahn, Watts, & Holland, 2002). In the current authors’ experience, collaboration is essential for the high-quality care of our students and for the sustainability of all aspects of suicide prevention initiatives.

In September 2005, a shared-care collaborative involving physicians from medical practices in the surrounding community, as well as those from the campus student health service, and psychologists and counsellors from the student counselling service was established at UBC. This collaborative was formed to implement systematic screening and assessment for depression, evidence-based, stepped-care treatment approaches and the MacColl Institute’s Care Model (MacColl Institute for Healthcare Innovation, 2008); its objectives are to strengthen and extend treatment options and improve mental health outcomes for UBC students and community members. Additionally, the collaborative streamlines referrals and maximizes sharing of resources. For example, the use of standardized assessment tools, clear criteria for referral to group programs, and training in how to talk to patients about group referral enables physicians to make direct referrals to a group program for the treatment of depression offered by the student counselling service. At the same time, referrals to the student health service for medical or psychiatric care are streamlined through the use of forms that identify the urgency of a referral, its purpose, and relevant background information. All of the practitioners have also received training in the use of self-management strategies for the treatment of mild depression (Bilsker & Paterson, 2005). (For a comprehensive description and evaluation of the shared-care program, see Sedgwick et al., 2008.)

Specialized Training in Suicide Assessment and Treatment

The Mental Health Service domain of the Jed Foundation framework also recommends training in suicide assessment and treatment of suicidality. Suicide assessment makes treatment possible and informs the specific nature of treatment over the course of therapy (Berman et al., 2006). In 2006, counsellors and psychologists from UBC’s student counselling service participated in a QPRT: Suicide Risk Assessment and Management Training program. The QPRT (Question, Persuade, Refer, and Treat) program is designed to help professionals assess suicide risk and establish a safety and intervention plan. Similar training was also provided for physicians participating in the shared-care collaborative. Each

year, practicum and intern trainees in the student counselling service receive training in suicide risk assessment and treatment, based on QPRT and best-practice guidelines developed by the Centre for Applied Research in Mental Health and Addiction (CARMHA, 2007). To support ongoing best practice, a long-standing protocol within the student counselling service has been the routine review of cases involving suicidality in a weekly case-management meeting that is attended by all counselling staff and trainees. Although beyond the scope of the current article, several helpful resources provide reviews of assessment and treatment of suicidality (see, e.g., Bryan & Rudd, 2006; CARMHA, 2007).

Increased Access to Counselling Services for At-Risk Students

The Jed Foundation framework's Mental Health Service domain recommends increasing the availability of mental health services. The majority of post-secondary counselling centres report not only increased numbers of students seeking access to counselling services but also an increase in the severity of client difficulties (Gallagher, 2006), a situation that has placed an ever-larger burden on counselling centre resources (Cornish, Riva, Henderson, Kominars, & McIntosh, 2000). Clearly, improving the accessibility of services for at-risk students represents a complex and challenging undertaking, which involves both the effective management of scarce resources and the development of an expanded referral network in the community.

To meet this challenge, the student counselling service at UBC has maximized access to its services by restructuring its appointment system to include a daily drop-in service and an emergency back-up system to ensure that space is available for students in crisis. Given its current level of resources, however, students who are not in crisis typically have to wait four to five weeks for a scheduled intake appointment during peak demand periods. Increasing access to counselling services to enable students who are not in crisis to receive timely assistance, thereby reducing the likelihood that their concerns might become crises, continues to be problematic. To address this challenge, a triage system is currently being developed that will provide more rapid access to counselling services for all students, irrespective of urgency.

The need to refer students to off-campus practitioners is a reality of many campus counselling services and deserves consideration in relation to at-risk students. A recently published study by Owen, Devdas, and Rodolfa (2007) found that 42% of clients referred off campus by a post-secondary counselling centre did not successfully connect with the referral. This finding is particularly concerning for at-risk students. Several strategies have been recommended to increase the chances of a successful referral, such as frequently updating referral lists with information about the current availability of community practitioners and offering campus follow-ups and support for clients through the referral transition process.

At UBC, students who present with suicidality or who are otherwise in crisis can be seen at the student counselling centre until they are stabilized; intake counsellors who refer students to community practitioners follow up with these students until they can be seen in the community. As noted earlier, among the recommendations made by Owen and his colleagues (2007), the need to obtain up-to-date

information about the availability of community mental-health practitioners to see new patients was identified. At the UBC counselling service, community referral resources are updated annually; however, obtaining current information on practitioner availability remains an ongoing challenge.

Enhanced Crisis Management Policy and Procedures

Effective crisis management in a college or university setting is multi-faceted. It involves a range of resources and protocols that typically includes mental health services for suicidal persons; local emergency facilities; mobile crisis teams, distress lines, and other services targeting at-risk, concerned, or bereaved individuals; outreach to survivors in the case of a student suicide; and mental health leave and re-entry policies. Further, collaboration among campus and community resources is crucial to ensure that the response is comprehensive and seamless (Jed Foundation, 2006; Suicide Prevention Resource Center, 2004).

For the past decade, the student counselling service at UBC has implemented a priority referral system that ensures timely access to counselling services for at-risk students referred by faculty and staff. Students calling after hours are offered the option of connecting directly to a community crisis line if they are in distress. In the fall of 2005, a crisis intervention team was established to manage more-complex student cases, which typically require multiple levels of intervention. With representation from counselling, health, disability services, residence life, campus security, and academic advising, the team ensures that all relevant aspects of an at-risk student's unique situation are addressed (physical and psychological health, housing, financial, academic, etc.). The team is also tasked with identifying ways in which the university community can respond more effectively to at-risk students. For example, the team has recommended that an involuntary mental-health leave policy be developed for situations in which, despite intensive treatment, a student's mental health problems prevent the student from functioning in an academic environment. Such a policy has been drafted and is in the process of undergoing review.

Disclosure of information in emergency situations can pose specific challenges for colleges and universities, especially as this relates to parents or other family members. Although ethics' codes for mental health professionals allow for disclosure without consent to protect against serious and imminent risk of harm to self or others, this disclosure is typically restricted to local hospital emergency departments and the police, if required. Parents and/or significant others are not routinely informed unless the client gives consent to do so. Provincial privacy statutes, however, justify more careful consideration by mental health providers of circumstances that would warrant emergency disclosure to family members.

Issues related to emergency disclosure of information have come under scrutiny by privacy commissioners in both Ontario and British Columbia, and their offices have recently co-published the document *Practice Tool For Exercising Discretion: Emergency Disclosure of Personal Information by Universities and Colleges and other Educational Institutions*, based on the privacy statutes

of their provinces (Loukidelis & Cavoukian, 2008). This document clarifies that “privacy laws *permit* the disclosure of personal information and personal health information, without consent, in emergency or urgent situations” (p. 7) and that this disclosure may be made for the purpose of contacting next of kin or a friend. At the same time, the document acknowledges that the disclosure of information without consent is very difficult, and decisions about whether to disclose and what to disclose to whom must be carefully considered on a case-by-case basis. It also recommends the development of policy and procedures for the emergency disclosure of information, including the establishment of an emergency disclosure contact, a person who would be identified as available for consultation during this decision-making process.

IMPLICATIONS AND CONCLUSIONS

This article has reviewed how one university has attempted to implement recommendations from the Jed Foundation framework. The seven broad intervention areas selected for focus continue to demand ongoing and active effort. To conclude this article, we identify several implications for post-secondary administrators, health practitioners, and other stakeholders to consider when planning the implementation of campus suicide-prevention strategies.

Adopt a wellness and prevention focus. Post-secondary suicide prevention in the 21st century must fully embrace a community-wide, prevention-based model. To be maximally effective, suicide prevention efforts must be aligned with efforts to reduce student academic stress and promote student engagement in campus life. Post-secondary institutions need to continually strive to understand and respond flexibly to the changing nature of students' lives and responsibilities. Increasing awareness of the significance of mental health as a prerequisite for learning, combined with an awareness of the impact of university policies and procedures on student mental health, can point the way to important areas for change.

Collaboration is key. Health providers must work together to remove barriers to free-flowing service and referrals for students because no one department can effectively manage suicidality and depression alone. Post-secondary student services must also work actively to form close ties with community resources, including mental health practitioners, hospital emergency departments, and police. Establishing effective working relationships with emergency and police departments can be challenging given the nature of shift work and the difficulty of identifying consistent contacts, but establishing these connections is vital for ensuring high-quality care in emergency situations.

Integrate risk-management strategies. Many of the strategies discussed in this article for reducing the risk of suicide will overlap with other risk-management efforts, such as those targeting violence or substance-related harm. Thus, in this era of tightening post-secondary budgets, it seems to be both good practice and cost effective to pool resources into integrated risk-management strategies.

Follow the framework. Developing a comprehensive suicide prevention strategy that will be effective at a post-secondary community level is an enormous undertaking. Nonetheless, even though it can be both daunting and costly, it is critical to ensuring the safety of students, staff, and faculty. For all of these reasons, efforts such as the Jed Foundation framework that integrate the existing evidence and best practices in suicide prevention and apply them to the post-secondary setting provide an invaluable starting point. The recommendations within the Jed Foundation framework are well established in the field of suicide prevention and are presented at a generic level, which makes them readily generalizable to any post-secondary institution. In addition, sharing successful implementation strategies across institutions in Canada will help promote the growth of effective campus suicide prevention practices throughout the country.

Measure your progress. The coordination of campus-wide efforts to evaluate the success of a comprehensive suicide prevention program is challenging, but the evaluation of the ongoing effectiveness of such programming both encourages continuous quality improvement and facilitates access to sustainable funding sources. Key steps in the process include identifying desired outcomes or indicators of success, determining the means of measuring the degree to which outcomes are achieved, and developing and implementing strategies designed to achieve desired outcomes. Depending on the size and nature of an institution, outcome data may be more or less difficult to achieve. For example, obtaining data on student suicide rates is more difficult at a large commuter university such as UBC; although the university receives notification of a student death, information about the cause of death, particularly in the case of a student who lives off campus, is not consistently available. The biannual ACHA-NCHA survey, however, shows more promise as it provides data on suicidality (thoughts and attempts), as well as on suicide-related indicators of student mental health, such as hopelessness and depression.

Build a sustainable commitment. Too often, student support services and especially student counselling services either assume primary responsibility and/or are perceived by the campus community to be primarily responsible for suicide prevention. Given the systemic nature of suicide and its prevention, this perception is neither sustainable nor desirable. Rather, efforts must be made to develop a vested interest among key stakeholder groups. UBC's Suicide Awareness Campaign and gatekeeper training program were established as campus-wide programs that serve faculty, staff, and students, with representation from departments responsible for the health and safety of these groups on respective steering committees. These committees rotate their chair every few years, ensuring that every key stakeholder group assumes leadership responsibilities.

Our work is never finished. With an undertaking as large as campus suicide prevention, ongoing efforts to sustain and cultivate programs are always required. It is important to note that, as with any case, the implementation efforts discussed here fall short of achieving the ideal Jed Foundation framework. For example, the important issue of means restriction, by which efforts are made

to reduce an at-risk individual's access to the means to complete suicide, is not addressed. Although UBC does have policies and programs designed to reduce student access to dangerous substances and other means, continuing to systematically integrate these programs within the overall suicide prevention platform is likely to be necessary. A second limitation relates to the existing evidence base. Further research focusing directly on the impact of suicide prevention efforts on the post-secondary community is desperately needed to establish the effectiveness of suicide awareness campaigns and gatekeeper training programs. Until such gaps in the research are filled, we are forced to rely on best practices. The framework developed by the Jed Foundation offers a valuable road map for helping post-secondary institutions to develop a comprehensive and effective suicide prevention strategy. *

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Michael Mandrusiak, is a core faculty member at the Adler School of Professional Psychology's Vancouver campus. He has worked in post-secondary mental health for several years and is now part of a non-profit group practice in the Greater Vancouver community. In 2007, during a post-doctoral fellowship at the University of British Columbia, Michael was a member of the Suicide Prevention Steering Committee and played an active role in campus suicide prevention initiatives. Prior to that, he was part of a working group formed by the American Association for Suicidology to create a consensus list of warning signs for suicide.